

More interesting is the case of the cypress. Dr. Coker avoids mentioning the technical name of this tree in the first 33 pages, and then in the four places where he does designate it specifically he calls it *Taxodium distichum*. On page 44 he implies that the only difference between our two eastern species (or varieties, as some still prefer to call them) of *Taxodium* is in the leaves; thus completely ignoring the differences in bark, buttresses and habitat pointed out by the reviewer in one of our best-known botanical journals in 1902 and 1905. The tree shown in his plate 12 is easily identified by its bark and surroundings as *T. imbricarium* (or *T. ascendens*, according to the Vienna rules of nomenclature); and one cannot be certain from his descriptions of the vegetation that typical *T. distichum* occurs there at all.

The notes on the distribution of each species average not more than two lines each. Assuming the index to be complete, it appears that over 40 per cent. of the species listed are not mentioned in the ecological part of the work, so that we are given very little information about their habitats and associations. Many of these 40 per cent., however, are weeds, which the author did not undertake to classify by habitat.

This work, especially the systematic part of it, is one of many recent examples that go to show how few people there are in the world at the present time who can write about a large number of plants and name them all correctly. The accurate determination of plants seems to be gradually becoming a lost art, and botanical text-books have almost ceased giving instructions in it. The ranks of the systematists are being decimated by desertion and death, and there are very few new recruits these days. (Even the present reviewer, who used to be primarily a systematist, has lost interest in nomenclatorial refinements, and now cares little for minute specific characters which are not visible from a moving train.)

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**Blakeslee and Jarvis' Trees in Winter\***

The title *Trees in Winter* suggests for the book under con-

\* A. F. Blakeslee and C. D. Jarvis, *Trees in Winter: Their Study, Planting, Care, and Identification*, pp. 1-466. [Illust.] The Macmillan Company, New York. Price \$2.00.

sideration a more limited field than it really includes. The subtitle, "Their Study, Planting, Care, and Identification," seems at first sight to contain an incongruity when considered in connection with the first part of the title. It would appear that either the book is concerned with a peculiarly limited phase of tree study, or else that its field is unevenly distributed, and poorly defined by title. The writers are, however, able fairly well to harmonize the contents with the title by pointing out that the proper time to plant and care for trees in early phases of their activity is during the months in which they are in their winter condition. So that the title might perhaps be changed advantageously to "Trees in their winter condition," etc., or something similar.

But if the title is somewhat inadequate, fault can hardly be found with the contents on this score. The book consists of two parts, the first on the planting and care of trees, and the second on their identification. The second part is practically the same as the bulletin on the same subject issued by the writers in 1911 from Storrs Agricultural Station, Conn. The only differences are in the way of additions and some amendments to the keys, etc.

Part I is stated to have been "written primarily for the individual and his home grounds." That it succeeds admirably in this purpose may be judged from a remark of a non-botanical friend of the reviewer, who on looking the book over, suggested that "it was a book which tells an ordinary person the things he wants to know about trees." That the writers had this purpose clearly in mind is shown in a later discussion under the topic, "Tree study in High Schools and Colleges" as follows: "Too frequently we forget that the student and the student's view-point are of more importance than botany and the botanist's view-point" (page 25).

The possession of this view-point is a prime necessity for any book which asks consideration from the general reader or for use as a textbook. Many textbooks have been written and are still appearing which serve not so much to interest and instruct the pupil as to present the individual point of view of the author.

Such books can have but one good *raison d'etre*, that of genius. Lacking this they are commonplace.

As suggested in a preceding paragraph, the authors of *Trees in Winter* ask consideration of their book both from the general reader, and as a textbook for use in high schools and colleges. In connection with the latter purpose they give a number of suggestive methods by which it can be used in teaching. They emphasize the necessity of careful planning in preparation for field trips, and of requiring some kind of report of trips from each pupil. A method by which the pupils are to compete in learning to recognize different kinds of trees is also described. Under the topic "Student collections" (page 28), the question of requiring students to collect and identify one hundred or so specimens as part of a tree course is objected to as requiring "an unduly large amount of mechanical labor in proportion to the results obtained."

The book appeals to the reviewer as a practical teachable book. To be used successfully, however, the classes should not be very large. It is probably best adapted for use with college classes, or perhaps with small classes of high-school pupils, especially in the country or small towns. Its use except as reference for the large classes in city high schools is undoubtedly impractical owing to the large number of pupils per instructor.

The scope and method of the first part can best be made clear by noting the chapter topics which are as follows: I.—Structure, life, and growth of a tree; II.—The propagation of trees; III.—Tree planting in rural districts; IV.—Tree planting in towns and cities; V.—The selection of trees for special purposes; VI.—How trees are planted; VII.—The care of trees; VIII.—Common injuries to shade trees; IX.—The control of parasites; X.—Insecticides, fungicides, and spraying.

These topics are treated in a clear and readable way. For example, under Chapter VIII, the writers discuss the sources of injuries to trees, as wires, grading, pruning, etc., also tree surgery, "dehorning," filling cavities, and bolting and chaining. Under Chapter V are such topics as Trees with showy flowers,—Blooming before or with the leaves,—Blooming after the leaves,—

Columnar or very tall trees,—Trees resistant to smoke,—Trees best adapted to calcareous soils,—Fruit trees,—etc., etc. Under Chapter III are discussed such topics as The conservation of good scenery,—Sign boards must go,—The problem of the country roads,—Planting for winter effect,—Planting plan,—The finished picture.

The book is well illustrated mainly with half-tones designed to make clear the text. The illustrations include pictures of tree groups and of single trees, of tools and of methods of using them, of planting plans and of methods of tree propagation, of tree pests and of caring for injuries. One discrepancy between text and illustration was noted. On page 51, under the topic "Care of seedlings," a method of shading seedlings is described with reference to figure 28 as illustration. This figure, however, proves to be a picture of a "stick of buds" for grafting purposes. Probably there may be discovered other discrepancies of this sort as well as errors in spelling overlooked in proofreading, but such errors are certainly not numerous, and the present writer does not believe that a review is the place to publish a list of errata as is often done.

Part II on the "Identification of trees" is, as already noted, like the Connecticut Agricultural Experiment Station bulletin which has already been briefly reviewed in *TORREYA* (Feb., 1912) by Taylor. For those who may not have seen that review, it may be noted that Part II consists of the following parts: Explanation of terms; Key to genera and species; based on bud, scar, and leaf characters, and finally the descriptive portion. In the last-mentioned portion, each species is given two pages, one of fine print descriptive of habit, bark, twigs, leaves, buds, fruit, with "comparisons," distributions, and wood description; the other page is devoted to half-tone illustrations of whole tree, bark, fruit, and twig. The descriptions appear to be adequate and the illustrations are well chosen. Both native and commonly cultivated species are described.

In conclusion the opinion may be expressed that this book is one which will meet with very general approval, and that the

authors have been successful in the task which they set themselves.

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## PROCEEDINGS OF THE CLUB

MARCH 11, 1913

The meeting of March 11, 1913, was held at the American Museum of Natural History at 8:15 P.M. Dr. E. B. Southwick presided. Ten persons were present.

The minutes of February 26 were read and approved. The announced scientific program consisted of a lecture on "Agriculture among the American Indians," by Dr. A. B. Stout.

The subject was presented from the viewpoint of popular economic botany. As an introduction, several views of typical Indian mounds were shown and a general discussion given of the extent of Indian life in America, especially in the area now embraced by eastern United States. The point was made that the so-called "mound-builders" were none other than the ancestors of the present Indians of the United States and that the domestication of all endemic plants which were in cultivation in America at the time of the discovery of the new world was the result of Indian agriculture. Views were shown of Indian corn-fields and garden beds as they appear today after having remained undisturbed since the Indians raised the last crop on these fields. The conspicuous hills of the former and the long parallel ridges of the latter reveal the methods of planting of various field and garden crops. The most important plants which were cultivated by the American Indians were briefly described and illustrated by lantern-slides, their uses given and mention made of their importance in the agriculture of today. Some archeological and historical data were given regarding the origin of these plants and the extent to which they were cultivated.

The principal plants thus considered were as follows: Indian corn, the agaves, tobacco, potato, tomato, Jerusalem artichoke,